

WHAT IS CLAIMED:

1. A catheter assembly for treating bifurcated vessels having a main vessel and a side branch vessel, comprising:

an elongated catheter;

a tracking guide wire lumen for receiving a tracking guide wire, the tracking guide wire lumen extending through at least a portion of the catheter;

an integrated guide wire lumen for receiving an integrated guide wire, the integrated guide wire lumen extending through at least a portion of the catheter;

a tracking guide wire positionable within the tracking guide wire lumen;

an integrated guide wire positionable within the integrated guide wire lumen;

and

a retaining element for retaining the tracking guide wire and the integrated guide wire.

2. The catheter assembly of claim 1, wherein the retaining element has a clip for retaining a guide wire.

3. The catheter assembly of claim 1, wherein the tracking guide wire lumen is of the over-the-wire type.

4. The catheter assembly of claim 1, wherein the tracking guide wire lumen is of the rapid exchange type.

5. The catheter assembly of claim 4, wherein the tracking guide wire lumen is unzippable.

6. The catheter assembly of claim 1, wherein the integrated guide wire lumen is of the over-the-wire type.

7. The catheter assembly of claim 1, wherein the integrated guide wire lumen is of the rapid exchange type.

8. The catheter assembly of claim 7, wherein the integrated guide wire lumen is unzippable.

9. The catheter assembly of claim 1, wherein the integrated guide wire lumen extends from a proximal end through a distal end of the catheter.

10. A method of preparing a bifurcated vessel having a bifurcation, a main vessel, and a side branch vessel, for an interventional procedure, comprising the steps of:

providing an elongated catheter;

5 providing a tracking guide wire and tracking guide wire lumen for receiving the tracking guide wire, the tracking guide wire lumen extending through at least a portion of the catheter;

10 providing an integrated guide wire and integrated guide wire lumen for receiving the integrated guide wire, the integrated guide wire lumen extending through at least a portion of the catheter;

wherein the tracking guide wire lumen and the integrated guide wire lumen run substantially parallel to each other throughout their lengths, and the tracking

